



DEFENSE LOGISTICS AGENCY ANNOUNCES OU 11 PROPOSED PLAN

1.0 INTRODUCTION

This Proposed Plan identifies the preferred alternative for protecting human health and the environment from impacted soil at former Building 202, referred to as Transitory Shelter (TS) 202, at Defense Supply Center Richmond (DSCR), Richmond, Virginia, and it provides the rationale for this preference. This Proposed Plan also includes summaries of other alternatives evaluated. The former TS 202 building footprint and surrounding impacted soils have been designated as Operable Unit (OU) 11.

This Proposed Plan is issued by the Defense Logistics Agency (DLA), the lead federal agency for remedial actions at DSCR, in agreement with the United States Environmental Protection Agency (USEPA) Region 3, the lead regulatory agency, as well as the Commonwealth of Virginia, Department of Environmental Quality (VDEQ), the support regulatory agency.

DLA is issuing this Proposed Plan for public comment and participation in accordance with Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended, and Sections 300.430(f)(2) and (f)(3) of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300).

DATES TO REMEMBER

PUBLIC COMMENT PERIOD:

X – Y, 2006

DLA invites you to participate during the public comment period by submitting comments on the OU 11 Proposed Plan.

PUBLIC MEETING:

Z, 2006 - 7:30 p.m.

DLA will hold a public meeting to explain the Proposed Plan, alternatives evaluated in the Feasibility Study, and additional evaluations summarized in the Feasibility Study Addendum. Oral and written comments will also be accepted at the meeting. The meeting will be held at the:

Bensley Park and Community Center
2900 Drewrys Bluff Rd
Richmond, Virginia 23237

For more information, see the Administrative Record at the following location:

Chesterfield Public Library
Central Branch – Local History Dept.
9501 Lori Road
Chesterfield, Virginia 23832
Phone: (804) 748-1603

Monday - Thursday

Hours: 10:00 a.m. – 9:00 p.m.

Friday, Saturday

Hours: 10:00 a.m. – 5:30 p.m.

Closed Sunday

or online at <http://www.adminrec.com/DLA.asp>

Send written comments postmarked no later than Y, 2006 to any of the following:

Defense Supply Center Richmond
Public Affairs Officer (DSCR-DSA)
Ms. Kim Turner
8000 Jefferson Davis Highway
Richmond, Virginia 23297-5000
(804) 279-3952
email: Kim.Turner@dla.mil
Fax (804) 279-6084

Virginia Department of
Environmental Quality
Office of Remediation Programs
Mr. James Cutler
629 East Main Street, 4th Floor
Richmond, Virginia 23219
email: jlcutler@deq.virginia.gov
(804) 698-4498

U.S. Environmental Protection Agency
Community Involvement Section
Ms. Trish Taylor
1650 Arch Street
Philadelphia, Pennsylvania 19103
email: taylor.trish@epa.gov
(215) 815-5539

Note: Selected environmental terms are defined in the glossary at the end of this document.

This Proposed Plan summarizes information from the OU 11 Remedial Investigation (RI), Feasibility Study (FS), and FS Addendum reports as well as other documents. DLA, USEPA, and VDEQ encourage the public to review these documents to gain a more complete understanding of the DSCR installation and the CERCLA activities that have been conducted for this OU.

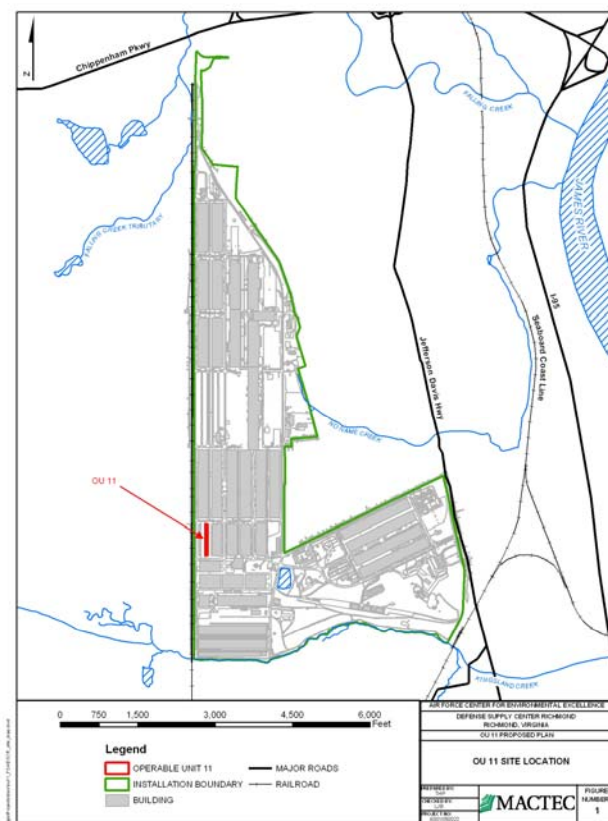
This Proposed Plan has been prepared to summarize DLA's and USEPA's preferred remedial action alternative at DSCR OU 11. The Proposed Plan is organized into the following sections:

- 1.0 Introduction
- 2.0 Site Background
- 3.0 Site Characteristics
- 4.0 Risk Summary
- 5.0 Remedial Action Objectives
- 6.0 Response Action
- 7.0 Summary of Remedial Action Alternatives
- 8.0 Evaluation of Alternatives
- 9.0 Summary of the Preferred Alternative
- 10.0 Community Participation

2.0 SITE BACKGROUND

DSCR is a federal installation (Figure 1) of approximately 650 acres located in Chesterfield County, Virginia, about 8 miles south of the City of Richmond. The property is owned by the U.S. Department of the Army and is occupied and operated by DLA. DSCR was built in 1941 as two separate facilities: the Richmond General Depot and the Richmond Holding and Reconsignment Point. With the creation of the Military General Supply Agency in 1962, the facilities were merged to become the Defense General Supply Center. DSCR, DLA's aviation, supply, and demand-chain manager, received its current name in 1996.

DSCR is a major industry in Chesterfield County. Land use in areas surrounding DSCR is primarily residential but also includes retail stores and light industry. The areas to the northeast, east, and south of DSCR have been developed as both single-family and multi-family housing. Water is supplied to residences and businesses by the City of Richmond water supply



system; however, some homes in the DSCR vicinity still have private wells (*Final Updated Residential Well Survey*, Law 2002), which are used primarily for landscape irrigation.

DSCR was nominated for the CERCLA National Priorities List (NPL) in 1984 and was formally added to the NPL in 1987. This action occurred as a result of DSCR receiving a Hazard Ranking System score that made it eligible for the list.

In 1990, DLA, DSCR, USEPA, and VDEQ signed a Federal Facilities Agreement that established DLA as the lead federal agency responsible for evaluating, selecting, and executing necessary, feasible, and reasonable remedial actions to assure protection of human health and the environment from releases at DSCR. The Environmental Restoration Program at DSCR is being conducted under CERCLA, as amended, and has been organized into 13 OUs, including 9 source (soil) OUs, 3 groundwater OUs, and

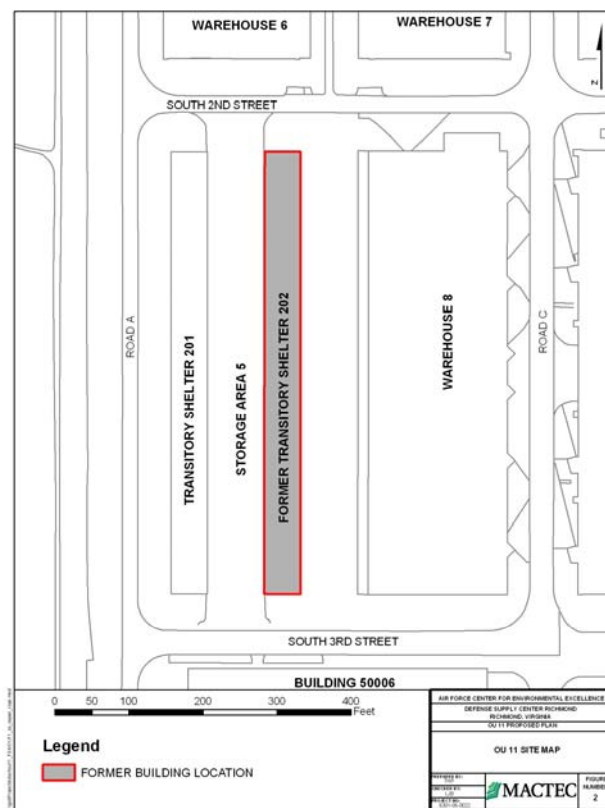
1 groundwater interim action OU. The 13 OUs are as follows:

- OU 1 – Open Storage Area
- OU 2 – Area 50 Source Area
- OU 3 – National Guard Source Area
- OU 4 – Fire Training Source Area
- OU 5 – Acid Neutralization Pits Source Area
- OU 6 – Area 50/Open Storage Area/National Guard Area Groundwater
- OU 7 – Fire Training Area Groundwater
- OU 8 – Acid Neutralization Pits Area Groundwater
- OU 9 – Interim Action for OU 6
- OU 10 – Former Building 68
- OU 11 – TS 202**
- OU 12 – Former Building 112
- OU 13 – Polycyclic Aromatic Hydrocarbon (PAH) Area

Final Records of Decision (RODs) have been issued for OUs 1, 3, 4, 5, and 12. Final remedial actions have been implemented at OUs 1, 3 and 5. The ROD for OU 5 called for no further action. A final ROD with an interim remedy was issued for OU 9; interim remedial action for OU 6 groundwater was implemented as OU 9. A removal action has been completed at OU 4.

Since 2000, DSCR has been integrating investigations and FSs for source and groundwater OUs as part of a comprehensive, installationwide completion strategy that recognizes the interdependence of soil and groundwater impacts. This strategy involves eliminating or reducing continuing sources (i.e., through removal or treatment), controlling constituent movement in the environment, and controlling exposure to compounds that could pose an unacceptable human health or ecological risk. Decisions made under this strategy define performance criteria for DLA to meet remedial action objectives (RAOs) in an effective and efficient manner.

Former TS 202 was located near the western installation boundary as shown in Figure 2. The former building was approximately 80 feet east of TS 201 and 170 feet east of Road A between South 2nd and South 3rd Streets.



TS 202 was an open storage shed used to store supplies, mainly foaming agents. The east bay of TS 202 housed approximately 800 55-gallon drums that contained a 5 percent solution of the pesticide dichlorodiphenyltrichloroethane (DDT). In 1981, DSCR documented that an unspecified number of drums had leaked. Following discovery of the leak, the floor was removed along with the underlying impacted soil, and clean soil fill was used to backfill the excavation. The storage facility was then paved, and a berm was installed in the north end of the storage area. In 2004, TS 202 was demolished; however, the asphalt remained. In October 2005, the footprint of TS 202 was paved with asphaltic concrete. Approximately 97 percent of the surface area is covered with asphalt or riprap. The remaining approximately 3 percent has vegetative cover. The planned use for OU 11 is materials storage. The former TS 202 building and surrounding impacted soil constitute OU 11.

The Proposed Plan for OU 11 is to implement all remedial actions necessary for reliable long-term protection of current and future receptors potentially

impacted by this OU and to complete remedial actions in a reasonable time for a reasonable cost to taxpayers.

3.0 SITE CHARACTERISTICS

Four sampling investigations were conducted at TS 202. The first soil assessment, conducted by the United States Army Environmental Hygiene Agency in 1986, identified the pesticides DDT, dichlorodiphenyldichloroethane (DDD), and dichlorodiphenyldichloroethylene (DDE) in the three soil samples collected. However, the soil data collected before 1992 cannot be validated in accordance with current procedures.

During the 1992 Expanded Site Investigation, six surface soil and two subfloor samples were collected. Low levels of toluene were detected. Three semivolatile organic compounds (fluoranthene, bis-2-ethylhexylphthalate, and pyrene) and five pesticides (DDD, DDE, DDT, alpha-chlordane, and gamma-chlordane) were detected. DDE and DDT were detected in each sample.

In 1995, 3 groundwater, 34 soil, and 2 storm drain sediment samples were collected as part of the RI. Soil samples were collected at depths up to 5 feet below ground surface (bgs). In soil, nine metals (aluminum, antimony, arsenic, chromium, iron, lead, manganese, thallium, and vanadium), three pesticides (DDD, DDE, and DDT), and one polychlorinated biphenyl (PCB) (PCB-1254) were found at concentrations above background and residential soil screening values (USEPA Region 3 Risk Based Concentrations [RBCs]). DDD, DDE, DDT, and arsenic also exceeded industrial RBCs. The maximum soil concentrations were at the surface with minimal migration to deeper depths. Only arsenic exceeded the industrial RBC in subsurface soil. Lead, DDD, and DDT in sediment from a manhole catch basin exceeded residential soil screening values. In groundwater, eight metals (aluminum, antimony, arsenic, chromium, iron, lead, manganese, and vanadium) and chloroform exceeded tapwater RBCs. All groundwater constituents above RBCs were from one well. A fourth groundwater investigation of the three existing OU 11 groundwater wells was conducted in October 2000. Two metals (arsenic and manganese) and two volatile organic compounds (VOCs; carbon tetrachloride and chloroform) exceeded tapwater RBCs,

but concentrations were below background and Virginia maximum contaminant levels (MCLs). Therefore, no constituents of potential concern (COPCs) were identified in groundwater and impacts on groundwater from past OU 11 operations were considered minimal.

A human health baseline risk assessment (HHBRA) was presented in the 1997 RI Report. The estimated carcinogenic risk to current and future on-site workers was below DSCR's acceptable on-installation risk level. Noncarcinogenic hazards for current on-site workers and future on-site workers were acceptable. The estimated noncarcinogenic hazard to future construction workers (4) exceeded the DSCR remedial goal of 1. However, none of the target organ-specific hazards exceeded 1, and the risk was therefore acceptable.

As outlined in the 1997 RI, if OU 11 were to be used for future residential purposes, the hypothetical carcinogenic risk from soil and groundwater exposures combined was estimated to be 5×10^{-4} (which corresponds to a 5 in 10,000 chance of adverse effects). This estimated risk exceeded the DSCR on-installation target level of 1×10^{-4} . The estimated Hazard Index (HI) for a future residential adult (10) and future residential child (50) also exceeded the recommended value of 1. However, future residential site use is not anticipated and is not consistent with DSCR's mission.

Ecological risks were considered low. Little habitat is available for terrestrial receptors given the installation's industrial nature and an extensive surface area covered by concrete, asphalt, or riprap. An ecological risk assessment was not conducted for TS 202 given the small amount of available habitat and the low probability of ecological exposure. Ecological receptors would not come in contact with storm drain sediments because access is gained only through metal manhole covers.

Conditions at OU 11 were considered protective of human health and the environment if the land use remained nonresidential. Institutional controls were recommended to restrict access and prevent residential exposure in the Final Feasibility Study (FFS) Report (2000).

In response to USEPA comments received in December 2001, additional studies were performed, including an HHBRA of the Creeks Adjacent to DSCR and a 3-Year Creek Monitoring Program (CMP). Drafts of these reports were issued in 2005 and both are being finalized to incorporate agency comments.

The purpose of the Creeks HHBRA was to determine whether constituents related to historical installation activities and detected in surface and sediment posed unacceptable human health risk. Of the 34 chemicals detected in Kingsland Creek surface water, nine (arsenic, iron, manganese, mercury, thallium, benzene, cis-1,2-dichloroethene, trichloroethene [TCE], and perchloroethylene [PCE]) were identified as COPCs based Virginia Surface Water Quality Standards (VWQSs) or Virginia MCLs and tapwater RBCs (where VWQSs or MCLs were not available). Of the 55 chemicals detected in sediment, only arsenic was selected as a COPC.

The noncarcinogenic HI values were less than the target of 1. However, the estimated cancer risk for adults and children combined (3×10^{-6}) was slightly above the off-installation target of 1×10^{-6} . The majority of this estimated risk was associated with arsenic, PCE, and TCE. The carcinogenic risk for adolescents was less than 1×10^{-6} . Arsenic was infrequently detected, and the highest surface water concentration was below the VWQS. The maximum TCE and PCE concentrations were also below VWQSs, and these constituents are likely to volatilize from water, further reducing exposure potential. Since Kingsland Creek is not used as a public water supply and since only off-installation portions of the creek are accessible to recreational users, the estimated risk is considered to overestimate actual risk. The risk associated with sediment was also considered to overestimate actual risk because the amount of sediment in the creek bottom was small. No further action was deemed necessary in Kingsland Creek to be protective of human health.

A CMP was conducted from 2001 to 2004. No adverse impacts to Kingsland Creek, which receives drainage from TS 202, from DSCR activities were indicated on bottom-dwelling (benthic) community abundance, species diversity, growth rates, or reproduction. Overall, creek communities were diverse, numerous,

and well-balanced. The presence of fish and amphibians was another indicator that Kingsland Creek provides suitable habitat and is a productive stream.

4.0 RISK SUMMARY

The HHBRA completed in conjunction with the RI was revised and submitted in the FFS Addendum Report (2006). The HHBRA was updated because land use at the installation is expected to remain industrial, and a residential exposure scenario was originally considered. An on-installation residential exposure scenario is no longer a reasonable possibility, according to the DLA master plan.

The revised HHBRA considered current and future on-site industrial workers and future on-site construction workers. (There is no current construction at OU 11.) Potential soil exposure to all worker receptors considered incidental ingestion, dermal contact, and dust inhalation. Current industrial workers could be exposed to shallow soils, and future industrial workers could be exposed to surface and subsurface soils. In addition to surface and subsurface soil exposure, future construction workers could ingest or come into dermal contact with groundwater during trench excavation.

For soils, a conservative screening process was performed using industrial soil RBCs. Soil COPCs based on direct contact were arsenic, DDD, DDE, and DDT. Twelve soil-to-groundwater COPCs were identified based on exceedance of USEPA Region 3 generic soil leaching levels, but they were shown to pose minimal risk to groundwater using an OU-specific leaching model. All 12 constituents had predicted concentrations below drinking water standards.

Groundwater constituents were compared to Virginia drinking water standards (MCLs) and tapwater RBCs. Eleven constituents (aluminum; arsenic; chromium; iron; manganese; thallium; vanadium; carbon tetrachloride; chloroform; cis-1,2-dichloroethene; and trichloroethene) exceeded screening criteria. Given a groundwater depth of approximately 12 feet bgs, potential exposure to future construction workers was evaluated. Groundwater concentrations of these constituents on the installation were less than Virginia MCLs except arsenic and thallium, which were close to MCLs.

Off-installation residents do not live adjacent to or close to OU 11. The closest residential wells are more than ¼ of a mile (1,850 feet) east of OU 11, and none of these wells (located along Senate Street) are in use. Residences are connected to the municipal water supply system. Therefore, potential transport off the installation was not considered significant, and off-installation exposure was considered an incomplete pathway.

VOC concentrations were below USEPA targets for indoor air. Therefore, this pathway was considered insignificant. No COPCs in groundwater exceeded VDEQ inhalation screening values for a construction worker in a trench.

The risk characterization evaluated noncarcinogenic and carcinogenic effects. The HI estimates systemic or noncarcinogenic risk. A cumulative HI of 1 was established as the acceptable benchmark for DSCR. The HI was below 1 for current and future industrial workers. For future construction workers, the cumulative HI was 2. The primary pathways associated with the HI of 2 were incidental soil ingestion and dermal contact with groundwater. When organ-specific HIs were evaluated, all estimates were below 1. These results showed that noncarcinogenic effects were not cumulative for a specific organ system; therefore, remedial action is not necessary for protection of human health.

Carcinogenic risk was at or below the DSCR on-installation target of 1×10^{-4} for all receptors (current and future industrial workers and future construction workers). Therefore, no unacceptable noncarcinogenic or carcinogenic risk was estimated for current or future industrial workers or future construction workers.

Based on human health risk, the lead agency's current judgment is that the preferred alternative identified in this Proposed Plan, or one of the other measures considered in the Proposed Plan, is necessary to protect public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

5.0 REMEDIAL ACTION OBJECTIVES

The RAOs for OU 11 are to:

1. Prevent future on-installation residential exposure to impacted soils; and
2. Prevent future on-installation residential exposure to groundwater.

6.0 RESPONSE ACTION

After this Proposed Plan has been reviewed during the public comment period and public comments have been evaluated, the preferred alternative for OU 11, the basis for selection, performance expectations, and contingency planning will be presented in a ROD. A Responsiveness Summary that addresses public comments will also be incorporated in the ROD.

7.0 SUMMARY OF REMEDIAL ACTION ALTERNATIVES

Two remedial action alternatives were developed and evaluated in the FS with respect to effectiveness, implementability, cost, and meeting RAOs. Costs include capital, annual operation and maintenance (O&M), and total present worth (PW). (Total PW represents the sum of capital and O&M costs discounted to a base year. Total PW allows a comparison of alternatives with expenditures made in different periods.) These remedial action alternatives are briefly described below.

Alternative 1: No Action

CERCLA requires that "No Action" be evaluated to establish a baseline for comparison to other remedial alternatives. No action leaves the impacted soils in place without measures to prevent exposure.

The only cost included was for the mandatory CERCLA five-year reviews. The estimated costs were based on a 20-year period and a 5 percent annual discount rate.

Estimated Capital Cost:	\$0
Estimated Five-Year Review Cost:	\$11,300
Estimated Total PW Cost:	\$ 11,300

Alternative 2: Institutional Controls

Institutional controls are non-engineered, legal measures to limit exposure. The OU 11 land use will

be solely for industrial purposes until conditions allow for unlimited use and unrestricted exposure. Institutional controls will be attached to the property deed to restrict groundwater use and prohibit residential or childcare-related land use, should the property change ownership in the future.

The estimated costs include a 20-year monitoring period, five-year reviews, annual inspections, and a 5 percent annual discount rate.

Estimated Capital Cost:	\$5,000
Estimated Annual O&M:	\$61,070
Estimated Total PW Cost:	\$66,070

8.0 EVALUATION OF ALTERNATIVES

This section describes the nine CERCLA evaluation criteria and summarizes the more detailed analysis presented in the FS for the two remedial action alternatives. The evaluation includes threshold criteria (requirements which must be met), balancing criteria (used to weigh trade-offs), and modifying criteria (anticipated agency and public acceptance).

Overall Protection of Human Health and the Environment

Overall protection of human health and the environment is the primary objective of remedial action. Alternative 1 does not satisfy the protectiveness criterion since it does not limit potential exposure at OU 11. Alternative 2 limits exposure through institutional control and provides annual inspections to confirm that conditions remain protective.

Compliance with Applicable or Relevant and Appropriate Requirements

Chemical-specific Applicable or Relevant and Appropriate Requirement (ARARs) were not identified for soil, but industrial RBCs were to be considered criteria. Both alternatives leave constituents in place above industrial RBCs. However, Alternative 2 provides for restricted access and limits exposure.

Location-specific ARARs include state and federal endangered species acts. As noted, OU 11 has little habitat available for ecological receptors. Endangered

plants, animals, or insects have not been observed in the former TS 202 area.

Long-Term Effectiveness and Permanence

Alternative 1 is not effective because exposure to soils above industrial RBCs on the installation is not restricted. Under Alternative 2, institutional controls can be very effective in limiting exposure and, therefore, in managing risk. Annual inspections are required as part of Alternative 2 to ensure continued effectiveness.

Reduction in Toxicity, Mobility, and Volume through Treatment

Treatment is not provided by either alternative. Therefore, constituent toxicity and volume remain unchanged. With Alternative 2, constituent mobility is reduced by maintaining the existing asphalt cover over impacted soils. The potential for future soil migration through the storm sewer to Kingsland Creek is reduced with Alternative 2.

Short-Term Effectiveness

Short-term effectiveness is used to evaluate risk to on-site workers and the nearby community during remedial action implementation. This criterion does not apply to Alternative 1 in the absence of any construction. Under Alternative 2, institutional controls are administrative restrictions and are effective immediately. Alternative 2 is not expected to adversely impact workers or pose a risk to the community.

Implementability

Alternative 1 is simpler to implement. No construction, specialized equipment, or materials are used. Only agency approval of five-year reviews is required. With Alternative 2, institutional controls will require some coordination with USEPA, VDEQ, and local/county agencies. However, institutional controls should be straightforward to implement.

Cost

The cost comparison is based on total PW, which includes capital and O&M costs. Present worth costs

were calculated using a 5 percent annual discount rate and 20-year timeframe for five-year reviews. Alternative 1, No Action, has a lower cost than institutional controls provide with Alternative 2.

Alternative 1 Total PW Cost:	\$11,300
Alternative 2 Total PW Cost:	\$66,070

Regulatory Agency Acceptance

Alternative 1 does not prevent potential exposure or provide annual inspections to ensure that conditions remain protective. Therefore, Alternative 1 is not preferred. USEPA and VDEQ support Alternative 2 because it is considered protective of human health and the environment. As part of Alternative 2, annual inspections will be conducted to confirm that RAOs are being met.

Community Acceptance

Community acceptance of the preferred alternative will be evaluated based on comments received during the public comment period for this Proposed Plan. A Responsiveness Summary will be included in the OU 11 ROD. Community acceptance is anticipated, since Alternative 2 should be protective of public health.

9.0 SUMMARY OF THE PREFERRED ALTERNATIVE

Based on the evaluation of alternatives, DLA considers Alternative 2, institutional controls, to be the preferred alternative to address impacted soils near former TS 202 (designated as OU 11). Alternative 2 is selected because it:

- Is protective of human health and the environment
- Limits exposure to soil constituents above industrial RBCs
- Provides annual inspections to document that conditions remain protective
- Reduces potential constituent mobility and potential migration through the storm sewer to Kingsland Creek (through maintenance of the

asphalt cover)

- Is straightforward to implement with no adverse short-term impacts
- Is expected to have regulatory agency and community acceptance

Alternative 2 consists of the following institutional controls and requirements:

- Implementing a deed restriction which prohibits groundwater use installationwide for potable purposes and for residential or childcare purposes, if the property is transferred
- Notification to USEPA and VDEQ of major land use changes at OU 11
- A five-year CERCLA statutory review to ensure that the chosen remedy continues to provide adequate protection of human health and the environment (until soil constituents no longer remain at concentrations that preclude unlimited use and unrestricted exposure or until regulatory requirements for five-year reviews are terminated)
- The current cover must be maintained to limit potential future transport of impacted soils through the storm sewer to Kingsland Creek
- In the event that impacted soils are removed in the future, they will be disposed in a permitted facility and replaced with clean fill to prevent exposure
- In the event that impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer, and inspections will be conducted annually

10.0 COMMUNITY PARTICIPATION

DLA provides information to the public regarding ongoing Environmental Restoration Program activities at DSCR through public meetings, and publication of a Community Newsletter and Fact Sheets, the

Administrative Record, the Community Involvement Plan (September, 2003), and announcements in the *Richmond Times Dispatch*. DLA encourages the public to gain a more comprehensive understanding of OU 11 and CERCLA activities that have been conducted at the installation.

A DSCR Restoration Advisory Board (RAB) was established in January 2002. The RAB currently holds monthly meetings to exchange information among community members and government agencies. These meetings are generally the second Monday of each month. RAB meetings are open to the public. For additional information regarding RAB meeting schedules and locations, contact the DSCR Public Affairs Officer at (804) 279-5896.

The public comment period for this Proposed Plan offers the public an opportunity to provide input to the OU 11 remedial action planning process. The Proposed Plan is available in the Administrative Record (see "Dates to Remember" on page 1 of this Proposed Plan). The public comment period will begin on **X, 2006** and end on **Y, 2006**. A public meeting will be held at 7:30 p.m. on **Z, 2006**, at the **Bensley Community Center** to provide an additional opportunity for public comments on the Proposed Plan. All interested parties are encouraged to attend and learn more about the OU 11 alternatives developed and the elements of the preferred alternative.

Glossary of Terms

Specialized terms used in this Proposed Plan are defined below:

Administrative Record – Documents made available to the public including reports used in making remedial action decisions.

Applicable or Relevant and Appropriate Requirements (ARARs) – The federal and state laws that a selected remedy should meet. These requirements may vary among sites and alternatives.

Human Health Baseline Risk Assessment (HHBRA) – An evaluation of the potential carcinogenic health risks and non-carcinogenic hazards associated with potential exposure of susceptible current and future human or ecological receptors to site-related constituents in environmental media (i.e., soil, groundwater, air, surface water, and sediment) assuming no action is taken to remedy conditions at the site.

Cleanup – Action taken to mitigate a release or threatened release of hazardous substances that could affect public health and/or the environment. The term “cleanup” is often broadly used to describe response actions including phases of remedial and removal actions.

Constituent of Concern (COC) – If the chemical-specific risk estimate for a COPC is greater than an acceptable risk level (i.e., a hazard index greater than 1 or a cancer risk greater than 10^{-5}), then the chemical is selected as a constituent of concern or COC. Risk-based cleanup levels are developed for COCs.

Constituent of Potential Concern (COPC) – A chemical that is selected for the risk assessment process because it exceeds a screening value.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) – A federal law passed in 1980 and subsequently amended. CERCLA is commonly referred to as the Superfund Law. The act created a special tax (on the petroleum refining and chemical manufacturing industries). The tax proceeds were placed in a trust fund to investigate and clean up abandoned or uncontrolled hazardous waste sites that endanger public health, welfare, or the environment. The taxing and funding provisions of the Act lapsed in 1995 and have not been renewed by Congress.

Five-Year Review – A process to evaluate the remedial action performance and determine whether conditions remain protective of human health and the environment. CERCLA as amended and the National Contingency Plan specify that remedial actions that result in hazardous substances, pollutants, or contaminants remaining at a site above levels that allow for unlimited use and unrestricted exposure be reviewed every five years to ensure protection of human health and the environment.

Groundwater – Water found beneath the ground surface that fills pores in earth materials such as sand, soil, gravel, or rock. In a productive water-bearing unit (known as an “aquifer”), groundwater occurs in sufficient quantities that it can be extracted for drinking water, irrigation, and other purposes.

Hazard Index (HI) – For each non-carcinogenic COPC and exposure pathway included in the risk assessment, the chemical-specific hazard quotients are summed to evaluate cumulative risk for a specific receptor. The sum of the hazard quotients is the hazard index.

Hazard Quotient – The ratio of the daily dose of a non-carcinogenic, site-related chemical due to onsite exposure divided by the reference dose for that chemical. The reference dose represents the daily chemical intake that is not expected to cause adverse effects.

Hazard Ranking System (HRS) – A scoring system used by USEPA to evaluate potential relative risks to public health and the environment resulting from releases or threatened releases of hazardous substances. This score is the primary factor used to decide whether a hazardous waste site should be promulgated to the National Priorities List.

Maximum Contaminant Level (MCL) – The maximum permissible level of a contaminant in a public water system. MCLs are defined in the Code of Federal Regulations (40 CFR 141, the National Primary Drinking Water Regulations that implement portions of the Safe Drinking Water Act). MCLs are legally enforceable groundwater standards.

National Priorities List (NPL) – The USEPA’s list of uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response. The list is based primarily on the score that a site receives under the HRS. The USEPA is required to update the NPL at least once per year.

Present Worth Analysis – A method to evaluate expenditures that occur over different periods. By discounting all costs to a common base year, the costs for different remedial action alternatives can be compared. When calculating present worth costs for Superfund sites, capital as well as operation & maintenance (O&M) costs are included.

Proposed Plan – A public participation requirement of CERCLA, in which the lead federal agency summarizes the preferred cleanup strategy, the rationale for the preference, the alternatives evaluated in the remedial investigation/feasibility study, and any ARAR waivers proposed for site cleanup. The Proposed Plan solicits public review and comment on all alternatives under consideration.

Public Comment Period – A prescribed period during which the public may review and comment on various CERCLA remedial action documents. For example, a minimum 30-day comment period is mandated in the National Contingency Plan to allow interested community members to review and comment on a Proposed Plan. Advance notification of the Public Comment Period dates must be published in a local newspaper.

Record of Decision (ROD) – A public document that identifies the selected remedy, the final remedial action objectives (RAOs), measures to achieve RAOs, the basis for the decision, remedial action performance expectations, metrics to assess RAO progress, and a contingency plan to address unanticipated performance concerns. The ROD is based on the information and technical analysis generated during the remedial investigation/feasibility study, consideration of applicable or relevant and appropriate requirements (ARARs), and consideration of public comments. All information used to make a final remedy decision must be documented in the site Administrative Record.

Remedial Action – The means selected to achieve RAOs; the construction or implementation phase that follows the remedial design of the selected cleanup alternative at an NPL site.

Remedial Investigation/Feasibility Study (RI/FS) – Investigative and analytical studies performed as the basis for remedial action decision-making. The RI/FS is intended to:

- Gather information necessary to define the impacted media at and near a site; identify potentially exposed human and ecological receptors; and determine the type, magnitude, extent, and fate of constituents;
- Identify (or waive) regulatory requirements that will affect the remedial action selection and implementation;
- Establish remedial action objectives (RAOs) and cleanup criteria;
- Identify and screen remedial technologies and develop remedial action alternatives; and
- Conduct a detailed analysis of alternatives (including cost).

Target Cleanup Level – The acceptable risk-based concentration of a COC. On-site concentrations of COCs exceeding the target cleanup level require remediation.

USEPA Region 3 Risk-Based Concentrations (RBCs) – Chemical concentrations in water or soil corresponding to acceptable risk levels (a hazard quotient of 1 or an excess cancer risk of 1×10^{-6}). RBCs are used to screen chemicals and select COPCs.

FOR MORE INFORMATION

For more information on the environmental program at DSCR or the Proposed Plan, please contact the following:

DLA Contact:

Ms. Kim Turner
Public Affairs Officer (DSCR-DSA)
Defense Supply Center Richmond
8000 Jefferson Davis Highway
Richmond, Virginia 23297-5000
email: Kim.Turner@dla.mil
Fax: (804) 279-6084

USEPA Contact:

Ms. Trish Taylor
Community Involvement Section
(3HS43)
US Environmental Protection Agency,
Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103
email: taylor.trish@epa.gov

VDEQ Contact:

Mr. James Cutler
Virginia Department of Environmental
Quality
Office of Remediation Programs
629 East Main Street, 4th Floor
Richmond, Virginia 23219
email: jcutler@deq.virginia.gov

COMMUNITY PARTICIPATION

Comment on the Defense Logistic Agency's
OU 11 Proposed Plan at the public meeting
or fax, email, or mail your comments to:

Ms. Kim Turner
Public Affairs Officer (DSCR-DSA)
Defense Supply Center Richmond
8000 Jefferson Davis Highway
Richmond, Virginia 23297-5000
email: Kim.Turner@dla.mil
Fax: (804) 279-6084

All comments must be postmarked by **Y, 2006**.

DATES TO REMEMBER

Z, 2006

The public meeting for comments on the
Proposed Plan will be held
starting **7:30 p.m.** at the

Bensley Park and Community Center
2900 Drewrys Bluff Rd
Richmond, VA 23237

All comments must be postmarked by
Y, 2006, for consideration.

COMMENTS: _____

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If you would like to be added to the DSCR mailing list and receive copies of future newsletters and fact sheets, please fill out the coupon below and mail it to:

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Public Affairs Officer (DSCR-DSA)
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